

To: Jr. Security Architect

From: Security Account Manager

Subject: New Hire Onboarding

Date: May 7, 2022

Welcome to AllSafe! We're a small law firm that we have built ourselves from the ground up. The owner's cousin is big into IT and helped us get started. We're looking to expand into a new location and we're not sure if we'll need to make any changes.

We're worried about all the news we've been hearing about ransomware. If we were to lose all of our data, we would be done. We have a lot of sensitive client information; so we need your advice!

Here is an overview of our infrastructure:

- Since our company is small and most of our employees are hybrid, we have workstations in the office that are shared and allow each employee to log in with their own credentials.
- All computers in the office are connected to a single all in one modem+wireless router.
- Each new employee that joins our company is assigned a username and password that allow access to company systems. Their username is the first initial of their first name + their last name. Their password is the SHA-256 hash of their username. We encourage our employees to change their password.
- Files are shared between workstations via a single SMB server. We just have all the workstations mount the network drive with the same "allsafe" smb account for simplicity. This user has full read/write privileges for the server.
- When employees aren't in the office, they can access the office workstations from home. We port forwarded port 3389 from one of the workstation's RDP server so that it is accessible from our public IP.
- We need the new location to be able to access the same files our other location. Can we somehow share our SMB server with the new location?

Please write a threat assessment of the network. Is any part of the current set-up leaving us vulnerable to attacks? What can we do to improve it?

Please create a network map to show your plan for the office network update. Feel free to do this on pen and paper, or with a website like <https://draw.io>

Finally, please write a brief description of how you felt about the task (i.e. How long did it take you? Did you find certain parts challenging?).

You may also include your resume with personal information removed.

Please feel free to reach out if you have any questions!

Kind regards,

Angela Moss